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Convergence

The book *Convergence* is a collaborative work written by many authors involved in service learning, including Thomas Colledge. The book is divided into eight chapters discussing the different types of learning through service programs. The chapters include topics such as why it would be beneficial to include this in the way engineering courses are taught, what constitutes a service learning course, how to implement such courses, and examples of colleges that offer such courses. Colledge starts off the book with an introduction explaining the purpose, which is to provide examples of academic programs being implemented at various universities around the world that seek to help and collaborate with people in marginalized communities to alleviate pressing problems they experience, while simultaneously enhancing the students’ academic and real world learning experiences. Colledge even went on to state that such programs have proven to increase retention rates among women and minorities in engineering.

The programs talked about and defined in the book include:

1. Humanitarian engineering- the use of science to direct the resources of nature with compassion to meet the basic needs of all, especially the economically poor. This program involves a balance of listening and learning from the traditional people while humbly sharing appropriate engineering knowledge.
2. Social Entrepreneurship- creating social impact by developing and implementing a sustainable business model that draws on innovative solutions that beneﬁt the disadvantaged and society at large.
3. Frugal Engineering- rethinking and rebuilding of the product/process development process in order to design, develop and deliver innovative solutions to customers at the Base-of-the-Pyramid.
4. Service Learning in Engineering- a form of “education that combines community service and academic instruction with critical, reflective thinking and civic responsibility.”

The authors state that most service learning programs overlap in order to serve their purpose of creating a lasting positive effect in the community they are intended to help and enhancing the students education. Colledge along with the rest of the authors also state that, in order for programs that involve service learning to thrive, there needs to be collaboration between many different majors, faculty members, colleges, and communities.

Overall, I found this book to very insightful as to all the work that goes into planning a course like the one we are currently taking. While reading the book, I found myself noticing the similarities in how our class is set up as a service learning course. I found the idea that the way engineering courses are being taught in college should be changed very appealing. Being an engineering student I have often found myself losing interest in many of my core classes and I feel that adding a service learning element would definitely help with this problem. I feel that this convergence theory would make engineering classes more relative to real world problems and provide students with valuable knowledge not obtainable in your average classroom setting. In my case, I also believe it would be a constant positive reminder as to why I chose engineering as my major.